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Farm and Garden

BLIGHT AMONG POTATOES.

How Disease Can Be Prevented During the Present Year.

A recurrence of late blight and dry rot among potatoes can be prevented next season. Clean seed is the great essential. Seed treatment is not effective for this particular disease.

The late blight dry rot exists to a considerable extent among storage potatoes, says E. C. Stakman, assistant plant pathologist of the Minnesota experiment station, St. Paul. If such lots are used for seed next season the disease may again be very destructive.



SEED POTATOES.

especially if weather conditions favor its spread. It is therefore of vital importance that healthy seed be used.

The Minnesota experiment station pathologists have been misquoted with reference to methods of securing such healthy seed. The soaking of seed potatoes is necessary in controlling some diseases, but treatment with formaldehyde or corrosive sublimate will not prevent late blight.

Seed potatoes should be secured from fields which have not had any of the disease during the past year. If healthy tubers are planted and the vines thoroughly sprayed with bordeaux mixture the disease can be controlled.

Seed Potato Importations.

The cultivation of potatoes, which were originally introduced into Germany from the United States, has been brought to such a wonderful stage of development that two distinct classes of potatoes are raised, the one rich in carbohydrates, but poor in nitrogenous matter for the fermentation industry, and the other rich in nitrogenous matter for eating purposes.

Curiously enough, seed potatoes are now imported into the United States from Germany because our farmers allowed this vegetable to degenerate to such a degree that it has substantially lost all value for seedling. The science of fertilizing achieved the amazing result that Germany's soil, although cultivated for almost 2,000 years, is today more productive than the virgin soil of the United States and Canada.

Deserted farms like those of the New England states and the state of New York are unknown in the empire. Chemistry is not only educating the farmer in scientific fertilizing, but producing the requisite artificial fertilizers.—Popular Science Monthly.

Kansas Silo Census.

Kansas has 7,137 silos. This is something like fifty-one silos to every county in the state, but there are twenty-one counties having less than a dozen and several having no silos whatever within their boundaries. Five of the rich Kansas counties have more than 200 silos and are reporting constant increases. The silo is changing the sky line of the Sunflower State, and it is changing other things as well. For one thing the stove, pit, brick, concrete and other forms of silos are helping to make Kansas one of the really prosperous states of the Union. It might help for the agricultural authorities in other states to make a census similar to the one just completed by Kansas. Comparisons are sometimes stimulating.—Farm Progress.

ORCHARD AND GARDEN.

Chop every old, useless and dying tree out of the orchard, keeping a memorandum of the number of trees thus removed and putting in an early order for others.

Wood ashes are good fertilizer for grapes. They will supply the necessary potash for them, and if the same amount of poultry droppings is added to the ashes the undesirable rank growth that too much ashes sometimes cause will be kept down.

Currents need little protection except from deep snows, which sometimes break down the branches when settling in the spring.

Watch the mulched strawberries. The mulch may be too heavy, and if warm, muggy weather prevails there is danger of injury.

There is no one who ought to have a better garden than the farmer who has all the land necessary with teams and usually help to care for it.

Cold frames, hotbeds, greenhouses and mushroom caves are all used for forcing rhubarb, but, lacking these, one may utilize an ordinary roof cellar.

NEIGHBORHOOD CHARITY.

The cry for food for war-ridden Europe has awakened our people to renewed appreciation of their duties to needy neighbors both in the next townships and in the countries beyond the seas.

The bins and larders of American farmers are the least influenced by the ravages of the present war, and the large harvest recently reaped brings an obligation to share with those who are without food. Shiploads of foodstuffs have sailed from American ports, and a systematic distribution of aid in Europe has been splendidly organized. But there are in every American community a few families that have felt the pinch of financial depression and are obliged to deny themselves even common necessities.

Too much attention cannot be called to our need of caring for those near to us, however urgent may be the demands of those at a distance. We have seen families subsisting on two scanty meals a day in communities where hundreds of barrels of potatoes were lying in the sheds awaiting a rise in price.—Country Gentleman.

GRADING SEED CORN.

May Be Graded Better Before Ears Are Shelled Than Afterward.

Seed corn may be graded better before the ears are shelled than afterward. The United States department of agriculture specialists in corn investigations consider it difficult to grade shelled corn satisfactorily.

If the seed ears vary greatly as to size of kernel they should be separated into two or three grades according to size of kernel. These grades should be shelled separately, tested in the corn planter and numbered to correspond with the number on the planter plates that are found to drop them most uniformly. These arrangements can be completed before the rush of spring work begins.

The first operation in properly shelling seed corn is the removal of the small kernels from the tips of the ears and the round, thick kernels from the butts. The former are less productive than the other kernels of the ear, but do not plant uniformly in a planter.

Shelling seed corn carefully by hand is profitable. The greater the acreage planted the greater the profit. Into a shallow pan or box each ear should be shelled separately, rejecting any worm eaten or blemished kernels. If the supply from the one ear appears good and contains no poor kernels it is poured into the general supply and another ear shelled in the same way.

The Cabbage Maggot.

The cabbage maggot is the principal handicap in the production of early cabbage and cauliflower. The insect is present in most communities where early cabbage is grown and occasionally causes extensive damage to this crop.

Of the insecticides that are employed to destroy maggots about the roots of the plants carbolic acid emulsion has generally been regarded as the most efficient. Tests with the emulsion at recommended strengths have demonstrated that it will prevent the hatching of the eggs and is fatal to the younger stages of the larvae. It may, however, cause injury to young seedlings and is not a safe remedy for the treatment of plants recently set in the field.

The value of tar pads, or hexagonal tar paper collars, for the purpose of



CABBAGE MAGGOT.

preventing the adult of the cabbage maggot from placing eggs about the stems of the plants has been demonstrated, but in spite of its effectiveness this method of protecting cabbage has not been generally adopted by truck growers. Tar pads will protect early cabbage from the pest at a cost of about \$1.40 per thousand plants. Truck growers, who are subject to losses by the cabbage maggot, are urged by the New York agricultural experiment station to test the tar pads experimentally as a basis for more extensive operations against this pest.

Silo Pays For Itself.

Thousands of farmers and scientists add their testimony and proclaim positively that the silo pays for itself in one year, that it doubles or even quadruples the value of the feed crop. An acre of good silage will keep a cow or steer one year.

LIVE STOCK HUSBANDRY

SIZE OF PIG LITTERS.

Sows of Heavy Milking Qualities the Most Profitable.

A sow that produces ten pigs, all growthy and strong, brought to weaning age as even as "peas in a pod," is making more money for her owner than a sow that produces fourteen pigs, four of which are runts that will lose money for their owner and the loss on which must be taken from the profit on the ten to find the real credit due the sow.

It is probable that four pigs from each litter will pay for the sow's keep, depending, of course, on the price of



When the meat is cold after killing the hogs cut the hams and other pieces nice and smooth. Don't let it freeze. For 100 pounds of beef or hams use nine pounds of salt, four ounces of saltpeter, two ounces of saleratus and two quarts of molasses or brown sugar. Add water to make enough brine to cover meat. Soak all together and skim. Let cool before pouring on the meat. Leave it in the brine for six or seven weeks, according to the size of the meat; then wash and dry off and hang in smoke for about ten or twelve days.

pigs, also of feeds and method of feeding sow, writes a correspondent of National Stockman. Therefore the value of any pigs above four could properly be considered profit on the sow. What is made on the pigs themselves will depend upon what they pay for the feed they eat.

As a general proposition, it may be figured that large litters—over eight pigs—pay better than smaller litters, and there is no danger of exceeding the practical limit in size of litters. While exceptional sows appear that may produce close to twenty pigs at a litter, there seems to be a natural limit to the number of pigs a sow will produce, beyond which breeders have been unable to go. Many who raise pure bred hogs have, among other things, selected constantly for prolificacy. Still, pure bred swine continue to average about the same number of pigs in each litter, the average for all breeds probably falling not far above eight pigs. It is likely grade sows do not reach this good average.

The hog feeder will do well to select always such sows as give promise of heavy milking and large litters. Some of the very best sows for producing market hogs are by no means specimens of porcine beauty. They may be angular and long skinned, but we may be sure they have great, long, deep middles and large, well placed udders. They produce a lot of pigs and feed them well.

RATIONS FOR SHEEP.

Frequent Change of Roughage Promotes Health of Animals.

During the season when the flock is confined to a dry ration the feed should be changed as often as possible. The animals will then eat their ration with a greater relish and a more favorable development will result. In the case of pregnant ewes the change will be beneficial to the unborn progeny.

With the wide range of roughage that can be grown upon the farm no keeper can have a reasonable excuse for not supplying his flock with a frequent change of feed. It is not necessary that several different rations be compounded and fed alternately, but rather the feeding of a variety each day. Any program of rotation is an unnecessary, but vary the bill of fare. If clover hay is given in the morning feed out straw at noon and corn stover at night. This may be reversed from time to time and other things substituted. Do not feed an abundance of any one thing, even though it is relished and greedily consumed by the flock.

It is not so important that the grain ration be varied, but the wider the range of grains that go to make it up the better. Especially is this true when pregnant ewes are being fed. Grain rations that are highly nutritious should be fed with caution, for after sheep have reached maturity they take on flesh very easily, and it is not advisable that they carry a large amount of surplus fat.

LIVE STOCK NOTES.

Silage is a good thing for dairy cows, for fattening steers, for feeding ewes and fattening lambs.

Put new floors in the pens when it is necessary. It is dangerous to have holes in the flooring of the pigpens.

Give each colt its regular grain ration and enough clean, bright hay to keep it growing and thrifty.

Flockmasters should carefully guard against exposing flocks to drafts. When they lie in drafts catarrh is liable to be the result. If the pigs are cold and pinched they can make no gain. Look out for them, protect them, or you will be the loser in dollars.

Keep the colts fat, and you will have an easy keeping, hardy horse.

POINTS TO OBSERVE WHEN BUYING A HORSE

In buying a horse be sure to choose one of quality, says a writer in the American Cultivator. See that he has good heels, well rounded and tough, wiry feet. See that he has good joints and a proper slope to his pastern, not straight up and down, so every time the weight of the horse comes down there is a great jar, and the jar passes up from tendon to tendon, clear to the muscles of the shoulder, but if there is a slope to the pastern there is a spring there, and the jar is broken, and remember that practically two-thirds of the horse's weight is carried on those front legs, so it is very necessary to break that jar, which will certainly be there if there is no slope to the pastern to make the weight come down easy. We do not want a horse sprung in the knees, because it injures those knees; we want the spring at the pastern.

We want a clean, flat leg, covered with fine, silky hair, because the hair on the leg indicates the quality of the bone under that hair, also the quality of the tendon. The horse that has coarse, kinky hair on his leg has a poor quality of bone.

Why do we want that sloping pastern on the hind legs? Because there is the propelling power of the horse. If that



In selecting a horse see that the animal has a clean, smooth, well built hock, because if the horse has a loose, beefy hock it sprains very easily. If it sprains on the inside nature puts on a patch and we call it a spavin. If it is one of those hock joints that show a hock curvature then the patch put on is called a "curb." The illustration shows a curbed hock.

pastern is straight he has no leverage, no fulcrum power in that joint. If it is straight behind and you put him to work those tendons shorten up a little, the ankle knuckles over and we call him "cock ankled."

Then your horse should be well muscled on arm and shoulder and on his thigh, especially well muscled over the loin, because those muscles are worked hard.

Then he must have a short back; he must be comparatively long from the point of the shoulder to the point of the hip, but his back should be shortened up by a good length of hip and well coupled loin, high wither and some slope to the shoulder. Of course, a running horse and a trotting horse need a very sloping shoulder. A horse to have a good walking gait must have some slope, so he can put his feet ahead.

Then, again, he needs some height to his withers, so he can pick up his feet and put them ahead with a clean mechanical action without stubbing his toes.

Feed Sheep Liberally.

A fleece of good quality cannot be grown on a poor, half starved sheep. If the ewes are allowed to get poor during the winter the chances are that the lambs will be weak and will perish for lack of nourishment and from cold, while the lambs from a well cared for ewe will be much abler to stand the cold if they should happen to be dropped when the weather is cold.

Trim the Foal's Feet.

The feet and pastern joints of horses are often deformed or injured through carelessness in keeping the feet properly trimmed during the growing period. The colt's feet should always be looked after, as its future usefulness and value as a grown horse may easily be reduced through carelessness in this matter.

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